

WHAT IS CLAIMED IS:

1. An apparatus comprising:  
a first device to receive a first signal representing a first supply voltage value associated with a first supply current value, and representing a second supply voltage value  
5 associated with a second supply current value.
2. An apparatus according to Claim 1, wherein the first signal represents an impedance value.
- 10 3. An apparatus according to Claim 1, the first device to adjust a supply voltage to a value based at least in part on the first signal.
4. An apparatus according to Claim 3, the first device comprising:  
a voltage regulator converter to generate the supply voltage; and  
15 a voltage regulator controller to receive the first signal and to transmit a control signal to the voltage regulator converter, the control signal to control the value of the supply voltage.
5. An apparatus according to Claim 3, further comprising:  
20 a second device to transmit the first signal and to receive the supply voltage.
6. An apparatus according to Claim 5, wherein the second device comprises an integrated circuit.

7. An apparatus according to Claim 3, wherein the supply voltage is associated with a supply current, wherein the first supply voltage value and the first supply current value define a first coordinate of a voltage vs. current coordinate system, wherein the second supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the supply voltage and a value of the supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.

8. An apparatus according to Claim 1, wherein the first signal represents a slope of a power supply load line.

9. An apparatus comprising:  
a first device to transmit a first signal representing a first supply voltage value associated with a first supply current value, and representing a second supply voltage value associated with a second supply current value.

10. An apparatus according to Claim 9, wherein the first signal represents an impedance value.

11. An apparatus according to Claim 9, wherein the first signal represents a slope of a power supply load line.

12. An apparatus according to Claim 9, the first device to receive a supply voltage having a value based at least in part on the first signal.

13. An apparatus according to Claim 12, wherein the supply voltage is associated with a supply current, wherein the first supply voltage value and the first supply current value define a first coordinate of a voltage vs. current coordinate system, wherein the second supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the supply voltage and a value of the supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.

14. An apparatus according to Claim 13, the first device to transmit the first signal to a second device and to receive the supply voltage from the second device.

15. An apparatus according to Claim 9, wherein the second device comprises an integrated circuit.

16. A method comprising:  
receiving a first signal representing a first supply voltage value associated with a first supply current value, and representing a second supply voltage value associated with a second supply current value.

17. A method according to Claim 16, wherein the first signal represents an impedance value.

18. A method according to Claim 16, further comprising:  
adjusting a supply voltage to a value based at least in part on the first signal.

19. A method according to Claim 18, wherein generating the supply voltage signal comprises:

receiving the first signal;

determining the value of the supply voltage based at least in part on the first signal;

5 and

transmitting a control signal to control a voltage regulator converter to generate the supply voltage.

20. A method according to Claim 18, wherein the supply voltage is associated with a  
10 supply current, wherein the first supply voltage value and the first supply current value  
define a first coordinate of a voltage vs. current coordinate system, wherein the second  
supply voltage value and the second supply current value define a second coordinate of the  
voltage vs. current coordinate system, wherein the first coordinate and the second coordinate  
define a line, wherein the value of the supply voltage and a value of the supply current  
15 define a third coordinate, and wherein the line substantially comprises the third coordinate.

21. A method according to Claim 16, wherein the first signal represents a slope of a  
power supply load line.

20 22. A method according to Claim 16, further comprising:  
adjusting a supply voltage having a value based at least in part on the first signal; and  
receiving a second signal representing a third supply voltage value associated with  
the first supply current value, and representing a fourth supply voltage value associated with  
the second supply current value.

25

23. A method according to Claim 22, wherein the second signal represents a second impedance value.

24. A method according to Claim 22, wherein the second signal represents a slope of  
5 a second power supply load line.

25. A method according to Claim 22, further comprising:  
adjusting the supply voltage to a second value based at least in part on the second  
signal.

10

26. A method according to Claim 25, wherein the second supply voltage is  
associated with a second supply current, wherein the third supply voltage value and the first  
supply current value define a first coordinate of a voltage vs. current coordinate system,  
wherein the fourth supply voltage value and the second supply current value define a second  
15 coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the  
second coordinate define a line, wherein the value of the second supply voltage and a value  
of the second supply current define a third coordinate, and wherein the line substantially  
comprises the third coordinate.

20

27. A method comprising:  
transmitting a first signal representing a first supply voltage value associated with a  
first supply current value, and representing a second supply voltage value associated with a  
second supply current value.

25

28. A method according to Claim 27, wherein the first signal represents an  
impedance value.

29. A method according to Claim 27, wherein the first signal represents a slope of a power supply load line.

5           30. A method according to Claim 27, further comprising:  
receiving a supply voltage having a value based at least in part on the first signal.

31. A method according to Claim 30, wherein the supply voltage is associated with a supply current, wherein the first supply voltage value and the first supply current value  
10 define a first coordinate of a voltage vs. current coordinate system, wherein the second supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the supply voltage and a value of the supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.

15           32. A method according to Claim 30, wherein transmitting the first signal comprises transmitting the first signal to a first device, and wherein receiving the supply voltage comprises receiving the supply voltage from the first device.

20           33. A system comprising:  
a microprocessor to transmit a first signal representing a first supply voltage value associated with a first supply current value, and representing a second supply voltage value associated with a second supply current value;  
a voltage regulator to receive the first signal; and  
25 a double data rate memory electrically coupled to the microprocessor.

34. A system according to Claim 33, wherein the first signal represents an impedance value.

5 35. A system according to Claim 33, wherein the first signal represents a slope of a power supply load line.

36. A system according to Claim 33, the voltage regulator to adjust a supply voltage to a value based at least in part on the first signal.

10 37. A system according to Claim 36, the voltage regulator comprising:  
a voltage regulator converter to generate the supply voltage; and  
a voltage regulator controller to receive the first signal and to transmit a control signal to the voltage regulator converter, the control signal to control the value of the supply voltage.

15  
20 38. A system according to Claim 36, wherein the supply voltage is associated with a supply current, wherein the first supply voltage value and the first supply current value define a first coordinate of a voltage vs. current coordinate system, wherein the second supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the supply voltage and a value of the supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.